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HYDRAULIC TURBINE WITH ENHANCED DISSOLVED OXYGEN

ABSTRACT

A hydraulic turbine is adapted to introduce oxygen into a water flowing through a water passageway of a turbine. The turbine has a circumferential chamber formed between a rotating band and a stationary discharge ring. The chamber has a gas admission aperture for receiving an oxygen containing gas into the chamber. A downstream end portion of the band has a plurality of spaced apart vanes providing chamber outlet passageways between the vanes and through the band. The vanes are configured to rotate with the band and to draw the oxygen containing gas and water from the chamber through the outlet passageways in the band and into the water passageway.